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| APPLICATION NO.  | FILING DATE | FIRST NAMED INVENTOR    | ATTORNEY DOCKET NO.            | CONFIRMATION NO.       |
|--|-------------|-------------------------|--------------------------------|------------------------|
| 10/525,601   | 03/13/2006  | Franz-Josef Meyer-Almes | Le A 36176                     | 7980                   |
| 35969  | 7590        | 04/10/2008              |                                |                        |
| Bayer Health Care LLC<br>400 Morgan Lane<br>West Haven, CT 06516 |             |                         | EXAMINER<br>LILLING, HERBERT J |                        |
|  |             |                         | ART UNIT<br>1657               | PAPER NUMBER           |
|  |             |                         | MAIL DATE<br>04/10/2008        | DELIVERY MODE<br>PAPER |

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

|                              |                                       |   |  |
|------------------------------|---------------------------------------|---|--|
| <b>Office Action Summary</b> | <b>Application No.</b><br>10/525,601  | <b>Applicant(s)</b><br>MEYER-ALMES, FRANZ-JOSEF |  |
|                              | <b>Examiner</b><br>HERBERT J. LILLING | <b>Art Unit</b><br>1657                         |  |

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 1 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 25 February 2005.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-8 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☐ Claim(s) \_\_\_\_\_ is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☒ Claim(s) 1-8 are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 25 February 2005 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)                     | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____                                      |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)          | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____  | 6) <input type="checkbox"/> Other: _____                          |

1. Receipt is acknowledged of a preliminary amendment filed February 25, 2005 in this application which is a 371 of PCT/EP03/09121 filed 08/18/2003 which claims benefit to GERMANY 102 39 005.3 FILED August 26, 2002.

2. Restriction is required under 35 U.S.C. 121 and 372.

This application contains the following inventions or groups of inventions which are not so linked as to form a single general inventive concept under PCT Rule 13.1.

In accordance with 37 CFR 1.499, applicant is required, in reply to this action, to elect a single invention to which the claims must be restricted.

Group I, claim(s) 1-7, drawn to a homogeneous assay method of quantitative measurement of kinase, phosphatase and phosphodiesterase (PDE) reactions, characterized in that the kinase, phosphatase or phosphodiesterase is allowed to react with a fluorescent, phosphorylatable or dephosphorylatable substrate in the presence of a polycationic polymer containing quencher groups and the change in phosphorylation is determined by way of the change in fluorescence, classified in Class 435, subclass 14.

Group II, claim 8, drawn to an assay method according to claim 1, in which the measurement is used for discovering active compounds which influence the kinase, phosphatase or phosphodiesterase reaction investigated, classified in Class 424, subclass 9.2.

In view of the record as indicated by the search report which stated that:

“Reasoned statement under Rule 66.2(a)(ii) with regard to novelty, inventive step or industrial applicability In light of the documents cited in the international search report, it is considered that the invention as defined in at least some of the claims does not appear to meet the criteria mentioned in Article 33(1) PCT, i.e. does not appear to be novel and/or to involve an inventive step (see international search report, in particular the documents cited X and/or Y and corresponding claim references).”

In addition, Invention I does not require the specifics of Invention II. Invention II is drawn to a different process which requires testing conditions that involves different compounds not required by Invention I

Restriction for examination purposes as indicated is proper because all these inventions listed in this action are independent or distinct for the reasons given above and there would be a serious search and examination burden if restriction were not required because one or more of the following reasons apply:.

- (a) the inventions have acquired a separate status in the art in view of their different classification which involves Class 435 for Invention I and Class 424 for Invention II;
- (b) the inventions have acquired a separate status in the art due to their recognized divergent subject matter since Invention II is drawn to the use of values to further examine various compounds for a different process than for an assay;
- (c) the inventions require a different field of search (for example, searching different classes/subclasses as well as electronic resources which requires employing different search queries for Invention I compared to Invention II);
- (d) the prior art applicable to one invention would not likely be applicable to another invention;
- (e) the inventions are likely to raise different non-prior art issues under 35 U.S.C. 101 and/or 35 U.S.C. 112, first paragraph.

**Applicant is advised that the reply to this requirement to be complete must include (i) an election of a invention to be examined even though the requirement may be traversed (37 CFR 1.143) and (ii) identification of the claims encompassing the elected invention.**

The election of an invention may be made with or without traverse. To reserve a right to petition, the election must be made with traverse. If the reply does not distinctly and specifically point out supposed errors in the restriction requirement, the election shall be treated as an election without traverse. Traversal must be presented at the time of election in order to be considered timely. Failure to timely traverse the requirement will result in the loss of right to petition under 37 CFR 1.144. If claims are added after the election, applicant must indicate which of these claims are readable on the elected invention.

If claims are added after the election, applicant must indicate which of these claims are readable upon the elected invention.

Should applicant traverse on the ground that the inventions are not patentably distinct, applicant should submit evidence or identify such evidence now of record showing the inventions to be obvious variants or clearly admit on the record that this is the case. In either instance, if the examiner finds one of the inventions unpatentable over the prior art, the evidence or admission may be used in a rejection under 35 U.S.C. 103(a) of the other invention.

3. This application contains claims directed to the following patentably distinct species :

A. Whereby the quantitative measurement is for

- i. kinase reactions,
- ii. phosphatase reactions,
- iii. phosphodiesterase reactions.

B. Whereby the above A reactions is with:

- a. fluorescent substrate,
- b. phosphorylatable substrate,
- c. dephosphorylatable substrate.

C. Whereby the reaction is in the presence of a polycationic polymer containing quencher groups:

C1: whereby the polycationic polymer is selected from the group consisting of

- p. polyethylenimine,
- q. polyarginine,
- r. polylysine,
- s. polyhistidine,
- t. other(s)-please specify,
- u. any combination of above-please specify.

C2: whereby the quencher groups are selected from the group consisting

of:

- 1. Dabcyl, QSY35

2. other(s)-please specify,
3. any combination(s)-please specify.

D. Whereby the fluorescent label is :

- i. fluorescein,
- ii. EDANS,
- iii. rhodamine,
- iv. Cy5,
- v. EvoBlue dyes,
- vi. coumarins ,
- vii. Alexa dyes,
- viii. other(s)-please specify,
- iv. any combination(s) of the above i-viii-please specify.

E. Whereby the measurement is carried out :

- a. kinetically,
- b. other-please specify,
- c. any combination of above-please specify.

s carried out in parallel/simultaneously in a microtitre plate.

F. Whereby the measurement is carried out in :

- x. parallel/simultaneously in a microtitre plate,
- y. other-please specify,
- z. any combination of the above-please specify.

G. Whereby the assay method according to claim 1, in which the change in fluorescence is:

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- a. the change in fluorescence intensity
- b. the change in fluorescence lifetime,
- c. only above a,
- d. only above b,
- e. either a or b,
- f. any combination of above-please specify.

H. Whereby the measurement is used for discovering active compounds which influence:

- k. kinase reaction,
- l. phosphatase reaction,
- m. phosphodiesterase reaction.

The species are independent or distinct because claims to the different species recite the mutually exclusive characteristics of such species. In addition, these species are not obvious variants of each other based on the current record.

Applicant is required under 35 U.S.C. 121 to elect a single disclosed species for prosecution on the merits to which the claims shall be restricted if no generic claim is finally held to be allowable. Currently, claims 1 and 8 are generic.

There is an examination and search burden for these patentably distinct species due to their mutually exclusive characteristics. The species require a different field of search (e.g., searching different classes/subclasses or electronic resources, or employing different search queries); and/or the prior art applicable to one species would



not likely be applicable to another species; and/or the species are likely to raise different non-prior art issues under 35 U.S.C. 101 and/or 35 U.S.C. 112, first paragraph.

**Applicant is advised that the reply to this requirement to be complete must include (i) an election of a species to be examined** even though the requirement may be traversed (37 CFR 1.143) **and (ii) identification of the claims encompassing the elected species**, including any claims subsequently added. An argument that a claim is allowable or that all claims are generic is considered nonresponsive unless accompanied by an election.

The election of the species may be made with or without traverse. To preserve a right to petition, the election must be made with traverse. If the reply does not distinctly and specifically point out supposed errors in the election of species requirement, the election shall be treated as an election without traverse. Traversal must be presented at the time of election in order to be considered timely. Failure to timely traverse the requirement will result in the loss of right to petition under 37 CFR 1.144. If claims are added after the election, applicant must indicate which of these claims are readable on the elected species.

Should applicant traverse on the ground that the species are not patentably distinct, applicant should submit evidence or identify such evidence now of record showing the species to be obvious variants or clearly admit on the record that this is the case. In either instance, if the examiner finds one of the species unpatentable over the prior art, the evidence or admission may be used in a rejection under 35 U.S.C. 103(a) of the other species.

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Upon the allowance of a generic claim, applicant will be entitled to consideration of claims to additional species which depend from or otherwise require all the limitations of an allowable generic claim as provided by 37 CFR 1.141.

4. The specification has not been checked to the extent necessary to determine the presence of all possible minor errors. Applicant's cooperation is requested in correcting any errors of which applicant may become aware in the specification.

Please note that in Claim 2 contains "oder" which appears to be an error.

5. Any inquiry concerning this communication or earlier communications from the examiner should be directed to HERBERT J. LILLING whose telephone number is 571-272-0918. The examiner can normally be reached on WORK AT HOME MAXIFLEX.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, JON WEBER can be reached on 571-272-0925. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

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(571) 272-0918  
Art Unit **1657**  
March 31, 2008,

/HERBERT J LILLING/  
Primary Examiner, Art Unit 1657